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 EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 13

Application Number: 08/579,072

Filing Date: 12/22/95

Appellant(s): Wyszynski

\_\_\_\_\_  
David H. Tannenbaum  
For Appellant

**EXAMINER'S ANSWER**

MAILED  
AUG 02 1999  
Group 2700

This is in response to appellant's brief on appeal filed 9/29/98.

**(I) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

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**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

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**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-21 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,361,395	Yamamoto	11-1-94
5,491,507	Umezawa et al.	2-13-96
5,555,550	Kaschke	9-10-96

"The New IEEE Standard Dictionary of Electrical and Electronics Terms", (January, 1993), pp. 90,500,1306.

Millman et al., "Microelectronics", (1987), p. 172.

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**(10)    *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1.    The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.    Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto in view of Umezawa et al (Umezawa).

Consider claims 1 and 7. Yamamoto discloses (fig. 1) a method and apparatus for processing a signal in a telephone equipment having:

means for accepting a signal (item 14);

means (16) for detecting the amplitude of accepted signals and for amplifying the accepted signals to a specific level; and

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means (17) for accepting the specific level amplified signals and for processing the amplified signals to reduce all but the intermediate frequency (IF) present in the signals while amplifying the IF to a certain fixed value for presentation to an output of the circuit (col. 4, lines 1-20).

Yamamoto differs from the present invention in that Yamamoto does not explicitly show accepting a signal is a video signal. However, the claimed limitations is very well-known in the signal processing art as evidenced by Umezawa.

Umezawa discloses a handy type video telephone equipment for receiving and transmitting a voice signal and a video signal (abstract).

Since Yamamoto and Umezawa's system are in the same field of endeavor, it would have been obvious to one of ordinary skill in the art to include video signal; thus, a user of the phone can receive not only voice signal, but also the user can receive a video signal (as taught by Umezawa).

Consider claims 2 and 8. Yamamoto further teaches means for accepting the presented signals and for amplifying the accepted signals a fixed amount (item 19 is not a variable gain amplifier).

Consider claims 3 and 9. Yamamoto further teaches item 19 is a low frequency amplifier.

Consider claims 4 and 10. Yamamoto further discloses the detecting and amplification means is a variable gain amplifier (VGA) (fig. 1, item 16).

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Consider claims 5 and 11. Yamamoto discloses means for accepting means further removing certain unwanted frequencies (col. 4, lines 1-20).

Consider claims 6 and 12. Yamamoto further discloses the amplification is the maximum level acceptable as an input to the processing means to avoid distortion of the signal (col. 4, lines 1-20).

3. Claims 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto in view of Kaschke.

Consider claims 13 and 18. Yamamoto discloses (fig. 1) a circuit for processing radio frequency (RF) signals having:

an input to the circuit for receiving an RF signal (12);

a mixer having an input connected to the RF signal input (connection between items 12 and 14);

a first filter having an input connected to an output of the mixer (connection between items 14 and 15);

a first amplifier having an input connected an output of the first filter (connection between 15 and 16);

a second filter having one input connected to an output of the first amplifier (connection between 16 and 17); and

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a second amplifier having an input connected to the out of the second filter (connection between 17 and 19), and the output connected to an output of the circuit (connection between 19 and 20).

Yamamoto does not explicitly show the mixer, first and second filters and first and second amplifiers are constructed on a single integrated substrate. However, putting the electrical components on a single integrated substrate circuit is very well-known in the art; and also, it is an obvious choice of design as evidenced by Kaschke (col. 3, lines 28-35).

Kaschke discloses a radio telephone wherein the electrical components are constructed on a single integrated substrate. Hence, it would have been obvious to one of ordinary skill in the art to have the components on a single integrated substrate in order to reduce size, weight, or components.

Consider claims 14 and 19. Yamamoto discloses the first filter is a band-pass filter and variable gain amplifier (VGA). Yamamoto does not disclose the first filter is a low-pass filter. However, using a low-pass filter instead of a band-pass filter is a design preference as it is well established that the low-pass filter generally possess all of the same characteristics of band-pass filter. Therefore, it would have been obvious to one of ordinary skill in the art to use low-pass filter since low-pass filter is cost less than band-pass filter.

Consider claim 15. Yamamoto further discloses the first amplifier means is a variable gain amplifier VGA (fig. 1, item 16).

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Consider claims 16 and 20. Yamamoto further recites the second filter means is an intermediate frequency, band-pass filter (fig. 1, item 17).

Consider claims 17 and 21. Yamamoto further discloses the second amplifier means is an fixed gain amplifier FGA (fig. 1, item 19 is not a variable gain amplifier).

**(11) Response to Argument**

**(A) “Claim 1**

The Examiner has rejected claims 1-12...The Umezawa reference discloses five physical... The Umezawa disclosure contains no discussion of a circuit...35 U.S.C. 112, paragraph six, states that a “means for” claim element is ‘constructed to cover the corresponding structure, material, or acts... This disclosure is clearly insufficient to teach any form of video or visual communications signal processing, except perhaps to show the concept that some form of visual signal processing is possible within the realm of mobile telecommunications.

M.P.E.P 2143.01 requires that there be some suggestion or motivation to combine prior art references in order to establish obviousness. There is no motivation to combine the non-enabling Umezawa disclosure with other references ...

M.P.E.P. 2143.03 requires that all claim limitations must be taught or suggested by the prior art ... The Yamamoto and Umezawa references not only fail to teach or suggest a monolithic or integrated circuit, as discussed above, but they also fail to teach or suggest any form of video ... "(pp. 6-8 of the appellant's argument).

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In response to the argument (A), the examiner disagrees with the appellant argument because Umezawa clearly discloses a video telephone equipment, comprising signal processing means (which construed to cover the corresponding acts) permitting at least either of a vocal communication and a visual communication (col. 2, line 65 to col. 3, line 1); therefore, one of ordinary skills in the art can see that the circuit or the processor which processes the visual signal.

Since Umezawa teaches that a handy type telephone can provide signal processing means for processing a visual communication, it would have been obvious to one of ordinary skill in the art to include video signal; thus, a user of the phone can receive not only voice signal, but also the user can receive a video signal, as taught by Umezawa.

In addition, the appellant shows novelty by stating that Yamamoto and Umezawa references fail to teach or suggest a monolithic or integrated circuit. However, Millman discloses “the term monolithic is derived from the Greek words monos (meaning ‘single’) and lithos (meaning ‘stone’). Thus a monolithic integrated circuit is built into a single ‘stone’ or single crystal of silicon.” (P. 172), and according to “the new IEEE Standard Dictionary of Electrical and Electronics Terms”, “substrate” means “The supporting material upon or within which an integrated circuit is fabricated or to which an integrated circuit is attached (p. 1306); therefore, the claimed limitations, “a monolithic circuit or a single substrate”, have very little patentable weight, and it is also very known in the art as evidenced by Kaschke (col. 3, lines 28-35).

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(B) "CLAIMS 2, 3, 4, AND 5

For the purpose of this appeal brief, claims 2-5 are grouped with claim 1..." (p. 8 of the appellant's argument).

In response to the argument (B), claims 2-5 are read on the combination of Yamamoto and Umezawa as disclosed above.

(C) "Claim 6

Claim 6 depends from claim 1 and further requires that the 'specific level' is a 'maximum level acceptable as an input to the processing means to avoid distortion of said video signal'. The Examiner has cited column 4, lines 1-20, of Yamamoto as teaching this limitation. However, the cited portion of Yamamoto merely discloses that the cited amplifier is a 'level control means' (column 4, lines 13-14). There is no teaching or suggestion in Yamamoto that amplifier 16 is used to amplify the signal to a 'maximum level acceptable'... not at the input of filter 17 as required in claim 6..." (p. 8 of the appellant's argument)

In response to the argument (C), Yamamoto clearly teaches that the amplification is the maximum level acceptable as an input of filter 17 (col. 4, lines 13-19), the filter 17 is to avoid distortion of the signal (i.e., removing the unwanted frequencies, col. 4, lines 16-18).

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(D) "CLAIM 7

The examiner has rejected claim 7 under...

However, neither reference teaches or suggests processing a video signal..." (pp. 9-10  
of the appellant's argument)

In response to the argument (D), the appellant's remark is similar to the remark recited  
for claim 1, therefore, the examiner gives the same response as set forth in paragraph (A)  
above.

(E) "CLAIM 8,9,10 AND 11

For the purpose of this appeal brief, claims 8-11 are grouped with claim 7..." (p 10. of  
the appellant's argument).

In response to the argument (E), claims 8-11 are read on the combination of Yamamoto  
and Umezawa as disclosed in above paragraph.

(F) "CLAIM 12

"Claim 12 depends from claim 7 and further requires that the ..." (p. 11 of the  
appellant's argument).

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In response to the argument (F), the appellant's remark is similar to the remark recited for claim 6 above, therefore, the examiner gives the same response as set forth in paragraph (C) above.

(G) "Claim 13 stands rejected as unpatentable over Yamamoto in view of Kaschke. The Examiner admits that Yamamoto does not teach constructing mixers, filters and amplifiers on an integrated substrate. However, the Kaschke reference is used to show that...

Kaschke does not teach putting electrical components, such as the claimed mixer, filters and amplifiers, on the same monolithic circuit or integrated substrate...

Moreover, the Kaschke LEDs are surface mount components that are mounted on a printed circuit substrate (column 3, lines 30-32). Kaschke does not teach components that are **constructed on an integrated circuit substrate** as required in claim 13... because Kaschke disclosure does not address the problems discussed in the Application, such as the lack of inductors in integrated circuits and the signal-to-noise consideration for integrated RF circuit. (p. 12 of the appellant's argument).

In response to the argument (G), the claimed limitation call for "constructed on an integrated substrate", it does not call for constructed on an integrated circuit substrate. Therefore, the broadest claimed limitation "constructed on an integrated substrate", i.e., all of the electronic components are constructed on a single unit which is clearly taught by Kaschke. In order to argue that "Kaschke disclosure does not address the problems discussed in the

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Application, such as the lack of inductors in integrated circuits and the signal-to-noise consideration for integrated RF circuit”, the limitation, “the lack of inductors in integrated circuits...” should be in claim 13. However, the limitation is not disclosed in claim 13. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(H) “Claim 13, 15-17 comprises limitations that are distinct from claims 1-12 and 14...” (p. 12 of the appellant’s argument).

In response to the argument (H), claims 13, 15-17 are read on the combination of Yamamoto and Kaschke as disclosed above.

(I) “Claim 14 depends from claim 13 and additionally requires a low-pass filter. The Examiner admits that Yamamoto does not teach a low-pass filter. (final Office Action, page 5). In order to provide the low-pass filter limitation, the Examiner suggest that low-pass and band-pass filters are interchangeable solely based upon cost...

In response to Applicant’s previous objections to the assertion that band-pass and low-pass filters are inter-changeable, the Examiner provided dictionary definitions...

Applicant submits that a partial citation of dictionary definitions in the final Office

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Action was not a clear and complete response to the Applicant's argument as required under M.P.E.P. 707.07... Additionally, the Examiner has not provided a prior art reference or affidavit that teaches exchanging low-pass and band-pass filters based merely upon cost..." (pp. 14-15 of the appellant's argument).

In response to the argument (I), the examiner clearly and completely responded to the appellant's arguments as required under M.P.E.P 707.07 in the final Office action. For example, the lower pass filter or band pass filter which filters a signal that has a single transmission band ("the new IEEE standard Dictionary of Electrical and Electronic Terms", PP. 90 and 500). Since appellant does not explicitly claimed what type of transmission band is passing through the low-pass filter, the examiner concluded that using a lower-pass filter instead of a band-pass filter for filtering a signal is a design preference as it is well established that the low-pass filter generally possess all of the same characteristics of band-pass filter. Nevertheless, the appellant discloses in the background of the invention that using a lower-pass filter for filter signal is well-known in the art.

(J) "CLAIMS 15, 16 AND 17

For the purposes of this appeal brief..." (p. 14 of the appellant's argument).

In response to the argument (J), claims 15, 16 and 17 are read on the combination of Yamamoto and Kaschke as disclosed in above paragraph.

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(K) "CLAIM 18

Claim 18 stands rejected as unpatentable over..." (p. 14 of the appellant's argument).

In response to the argument (K), the appellant's remark is similar to the remark recited for claim 13 above, therefore, the examiner gives the same response as set forth in paragraph (G) above.

(L) "CLAIM 19

Claim 19 depends from claim 18 and additionally requires..." (pp. 15-16 of the appellant's argument).

In response to the argument (L), the appellant's remark is similar to the remark recited for claim 14 above, therefore, the examiner gives the same response as set forth in paragraph (I) above.

(M) "CLAIM 20 AND 21

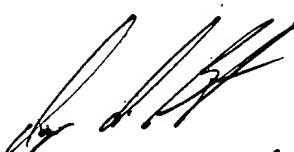
For the purpose of this appeal brief..." (p. 16 of the appellant argument)

In response to the argument (M), claims 20 and 21 are read on the combination of Yamamoto and Kaschke as disclosed in above paragraph.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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July 30, 1999



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